

ALL-FIBER Q-SWITCHED LASER

ABSTRACT OF THE INVENTION

An all-fiber Q-switched laser includes a gain fiber
5 spliced between narrowband and broadband fiber gratings that
define a polarization-dependent resonant cavity. The
narrowband grating is, for example, formed in a PM fiber to
create a polarization-dependent reflection band. A modulator
applies stress to the fiber chain to induce birefringence
10 and switch the cavity Q-factor to alternately store energy
in the gain fiber and then release the energy in a laser
pulse.